

This year, as in the past, the Region 6 Superfund Division continued to conduct the Agency's mission essential function by addressing the threat of exposure to hazardous chemicals, pollutants and contaminants from the communities we serve. This has been accomplished through the assessment and remediation of some of the Nation's and Region's most contaminated properties. Additionally, the Regional Superfund program has responded to eleven environmental emergencies and twelve oil spills in Fiscal Year 2017. Through the Brownfields and Superfund Reuse programs, some of the formerly contaminated sites have been redeveloped into parks, daycares, clinics and affordable housing. The division's efforts have resulted in environmentally safer and healthier communities. Communities where children young and old can live, learn, play and work.

**Live:**

Protecting human health and the environment and ensuring the air they breathe and the water they drink is safe is part of what the division accomplishes on a daily bases. This year, three high profile emergency responses occurred over the holidays:

- Two days before Thanksgiving 2016, the Airosol Inc. facility in Neodesha, Kansas had a catastrophic explosion and fire. EPA Region 7 deployed On-Scene-Coordinators to the site. The local fire department failed to collect the fire suppressant water from the response which resulted in contaminated water entering the Verdigris River which starts in Kansas and enters Northeast Oklahoma. In Oklahoma, this river serves as the raw water for several drinking water systems. Region 7 notified Region 6 of the incident. Due to several drinking water intakes being shut down during Thanksgiving week, the incident received a high level of involvement from the Kansas governor's office, State of Oklahoma, EPA HQ, and others. After 24 hours of the drinking water intakes being shut in, the water storage at the drinking water systems began to dwindle and the ability of these systems to provide safe drinking water became critical. However, due to the actions and coordination between the two regions and states, water samples were collected and analyzed quickly and both Kansas and Oklahoma had the information they need to allow the intakes to be opened. This minimized impacts to drinking water systems and citizens of these two states
- On December 15, 2016, EPA was notified of a December 14<sup>th</sup> public "Do Not Use the Water" advisory issued by the City of Corpus Christi. The advisory warned Corpus Christi's 320,000 residents to not drink or use tap water following a back-flow incident at an asphalt terminal operated by Ergon Asphalts & Emulsions on the property of Valero Energy Corporation. Also on December 15, the City of Corpus Christi provided a news release that identified the chemical of concern as asphalt emulsifier, Indulin AA-86, and that City officials estimated the amount of the product involved in the back-flow incident from 3 to 24 gallons. The Superfund division worked collaboratively with the state of Texas, EPA Region 6 Laboratory and ORD, to restore safe drinking water in Corpus Christi for over 320,000 citizens including children and elderly residents.

- On January 2, 2017, a family of 10 was accidentally exposed to phosphine gas. Four of the children died and six other family members were hospitalized after the illegal application of a restricted use pesticide under a residential home in Amarillo, Texas. The incident occurred when an aluminum phosphide fumigant, under the house to address a pest problem. The application created strong odors in the house and the resident attempted to wash the material away using water. Aluminum phosphide, when mixed with water, creates phosphine gas, which is toxic and may ignite spontaneously in air. Through the emergency response efforts, the city was able to determine whether the house would be habitable for the family to return.

### ***Remediating Contaminated Parcels:***

- On September 7, the EPA mobilized to respond to a referral by New Mexico Environment Department (NMED) of a residential home with a significant cache of laboratory chemicals that were in a shed and piled in the middle of the backyard. The local university, Highlands, notified the state that they would address securing the chemicals due to laboratory equipment at the home with the university name; former tenant had been a lab tech. A large pile of debris with chemicals was in the middle of the backyard. Chemicals were also in a truck and the shed. Mercury was observed on the ground in the entrance to the shed. The NMED radiation specialist found three chemicals with radiation measurements and two source buttons in the debris.
- The Southern Mineralite site located in the Bywater neighborhood of New Orleans is the location of a former WR Grace vermiculite exfoliation facility. Exfoliation operations began at the site in the mid-1930's and ended sometime in the mid-1960's. After this facility closed down, operations were then moved approximately 10 miles west to the W.R. Grace River Road facility in Jefferson, LA. This facility then operated until the late 1980's. Vermiculite ore processed at both facilities was received from the WR Grace mine in Libby, Montana. Vermiculite ore from the Libby mine is now known to be contaminated with a form of tremolite asbestos. The two sites are situated in a mixed commercial, industrial, and residential areas with homes actually bordering parts of the Southern Mineralite site. EPA Region 6 conducted extensive soil sampling and air sampling on the sites as well as in the nearby residential neighborhoods. Results from the sampling showed elevated levels of asbestos in soils on and in the immediate vicinity of the two former facilities as well as in dust samples collected inside the former exfoliation building at the Grace River Road site. With EPA and LDEQ oversight of the cleanup activities, approximately 5,000 tons of contaminated soil were removed from the Southern Mineralite site and 1,000 tons were removed from the Grace River Road site.
- At the request of the states of Texas, Oklahoma and New Mexico, the Regional Superfund program has assessed and removed mercury from homes, schools, vehicles, and public buildings.
  - Midland Mercury Site, Midland, Midland County, Texas: In June 2016, a teenager found and spilled approximately 8 oz. of mercury within a detached residential structure (280 sq. ft.). The teenager attempted to clean-up the spill. The teenager did not inform the parents of the mercury or the spill. The teenager was exposed for 6 – 9

months before symptoms required the family to seek medical attention in March 2017. After medical tests and a patient medical interview, it was determined that the symptoms were related to mercury exposure. On March 27, 2017 the Texas Commission on Environmental Quality (TCEQ) notified the EPA Region 6 of the incident. The EPA and TCEQ determined that clean-up was necessary to prevent continued exposure to the family and exposure to others by the potential tracking of mercury contamination to other locations. After coordination with TCEQ, EPA initiated removal activities on March 30, 2017. Cleanup was completed and ended on April 4, 2017.

- Sapulpa Mercury, Sapulpa, Oklahoma: The Sapulpa Mercury removal action removed mercury contamination at a residential property where visiting young child family members could have been exposed to inhaled mercury exposure. In addition, the removal action was protective of the child population in the vicinity of the property, including an elementary school within 500 feet of the Site and a junior high/high school complex within 0.5 miles of the Site.
- As an after action activity related to the a multi-state, multi-city mercury exposure, which started in Normangee, Texas, the Superfund program staff conducted follow up outreach efforts with the Toxicologist at Parkland Hospital to share information about strategy, equipment, protective measures the agency takes with regards to mercury. The Toxicologist plans to include this as part of the training they provide their pediatricians regarding Mercury poisoning.
- On June 23, 2016, EPA was notified of a mercury spill at a residential home located on a ranch in Golden, Sandoval County, New Mexico. The spill occurred in the bedroom of a 4 year old child. Initial blood screening for the child indicated an elevated level of 67 µg/L. All of the occupants of the mercury impacted home relocated to another residential home on the ranch. The Poison Control and Information Center of New Mexico requested the assistance of ATSDR and EPA to assess the home for mercury contamination. Due to the high likelihood of the mercury getting tracked from the contaminated house to other residences or public areas. The spilled mercury posed a substantial threat to human health and the environment through its toxic vapors and highly traceable/spreadable nature. EPA worked closely with the New Mexico Environmental Department and the local authorities to commence a removal action at the incident location to address the mercury contamination and make the house inhabitable.
- Broken Bow, Oklahoma
- On January 4, 2017, the Superfund program was notified of a mercury spill in Mesilla, New Mexico that had occurred in a residential property. The elemental mercury had been stored on at the private residence in a carport. The owner's grandchild had obtained the mercury from the carport and had brought a small amount of mercury into the home when it was dropped onto a bathroom floor. The owner's son attempted to clean up the mercury beads using duct tape and shaving cream. The owner's granddaughter was later tested for mercury poisoning.

- EPA Removal Action at the former Eagle Picher site in Henryetta, Oklahoma has cleared the way for a \$1 million Rural health clinic to be built. Through the Superfund Reuse program, EPA and the State of Oklahoma were able to help the community select a beneficial reuse alternative for the reclaimed parcel of land. East Central Family Health Center plans to open the clinic in 2019.
- Safe conclusion of Camp Minden which protected X thousand children at home in a 4 mile radius and Y children at schools
- Proposed the San Jacinto cleanup with risk driven by childhood exposure to dioxins protecting citizens in Baytown, Texas.
- The number of generations of children protected from lead poisoning has risen to XX million children since 1983.
- ***Inspections of High Risk Chemical Facilities:***
  - Under Section 112r of the CAA the Region 6 Risk Management Program within the Superfund Division performs inspections at facilities with the potential to release hazardous chemicals to the air. The inspection activity protects thousands of children who live near these facilities. Approximately 35 non-Title V facility inspections each year.

**Learn:**

- EPA successfully worked with ITEC, seven Tribal Nations, BIA, ODEQ, OCC, the City of Anadarko, and a PRP to remove a potential hazardous site in Anadarko, Oklahoma. The Anadarko Tank Battery Site (Site) was referred to EPA by ITEC following their assessment which found a tank battery with unknown hazardous substances, soil staining, historical dumping, and drums easily accessible by the public and within close proximity to local schools and various residential homes and potentially a threat that could impact seven local Tribal Nations within the vicinity.
- Making a Visible Difference in Communities” (MVD) is one of the Environmental Protection Agency (EPA) place-based initiatives. As part of on-going cleanup efforts, the EPA Region 6 provided assistance to the Louisiana Department of Environmental Quality (LDEQ) for the regulatory oversight of two creosoting facilities, one in Alexandria and the other in Pineville. Under the MVD initiative, EPA staff members joined as a team to create a collaborative approach to address the multiple environmental issues in the community, improve internal communication as well as external

communication, and bring concepts of sustainability to the community. The Superfund division assisted the Alexandria/Pineville Making a Visible Difference Cross divisional team in helping to create a safer environment for children in this community. EPA conducted sampling in Hunter Park and at JS Slocum Training Center to address the community's concern of potential impacts from these facilities to nearby areas where children play or go to school. Initial sampling indicated the presence of dioxin/furans, polycyclic aromatic hydrocarbons and polychlorinated biphenyls in the school yard at the JS Slocum Training Center. In response EPA responded by collecting wipe samples within the school. To accomplish this task, Superfund staff developed a new sample methodology to evaluate the risks for these school children. The analytical results determined that the school building was safe for the children.

**OR**

- Colfax Creosoting Site, Pineville, LA – EPA performed a sampling and analysis event to assess the potential for pentachlorophenol, dioxin and creosote contamination from the adjacent Colfax Creosoting facility had effected the indoor environment of the JS Sclocum – Rapides Training Academy. The school serves students from age 6-22 with autism and severe/profound mental disabilities.

**Play:**

**Absentee-Shawnee Youth Camp, Camp Nikoti:** With brownfield clean up funds the Absentee Shawnee have been able to put a 200 acre site back into productive use as a Youth Camp. Specifically, brownfield funds were utilized to remove 100 tires and to clean-up the open dump. The site is currently under development for the Youth Camp which is expected to serve 700 campers from 7 to 17 years of age.